

Application Serial No.: 10/586,900
Final Office Action dated: January 15, 2010
Response to Final Office Action dated: March 26, 2010

AMENDMENTS TO THE DRAWINGS

Please replace the previous Replacement Sheet 1/1 with the enclosed Replacement Sheet 1/1.

REMARKS

In the Final Office Action dated January 15, 2010, in which claims 1-8 were pending, the Examiner:

objected to the Drawings under 37 CFR § 1.83 for failing to show every feature of the claimed invention; and

rejected claims 1-8 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,056,088 to Gerstenkorn (“Gerstenkorn”).

Claims 1-8 are presented for re-consideration, without amendment, in light of the following remarks.

The Examiner objected to the Drawings under 37 CFR § 1.83 for failing to show every feature of the claimed invention, including an “elevator” and a “connection box or housing” as recited in claims 1 and 4. Applicants herein amend the Figure to illustrate the “elevator” and “connection box or housing”. Accordingly, Applicants respectfully submit that the Examiner’s objection to the Drawings should be withdrawn.

The Examiner rejected claims 1-8 under 35 U.S.C. § 102(b) as being anticipated by Gerstenkorn. A rejection under 35 U.S.C. § 102(b) is improper unless a single prior art reference shows or discloses each and every claim recitation.

Applicants’ claim 1 recites:

A method for stopping elevators-by using at least one AC motor driven by a static frequency converter, *in which a brake relay controls the brake of the motor so that de-energizing the brake relay will brake the motor, the brake relay being connected with a safety switch in such a manner that de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field.* (emphasis added.)

Gerstenkorn does not show or disclose each and every recitation of claim 1 for several reasons. First, Gerstenkorn does not show or disclose a *brake relay* that *controls the brake*, as recited in claim 1. The Examiner asserts that, in Gerstenkorn, “AC motor 5 is driven by an inverter 56 and is braked by brake 6 based on a

monitoring equipment 1 and switching brake circuit 3" (Office Action, p. 5, paragraph 8, ll. 3-4). However, Gerstenkorn does not show or disclose that *a brake relay controls the brake of the motor so that de-energizing the brake relay will brake the motor* as recited by claim 1. Instead, Gerstenkorn is directed to an elevator safety circuit monitor and control for drive and brake that includes a motor-switching and brake-switching circuit 33 (Gerstenkorn, col. 2, ll. 18-20). However, the motor-switching and brake-switching circuit 33 of Gerstenkorn are not, and do not include, a brake relay. Thus, Gerstenkorn does not show or disclose a *brake relay controls the brake*, as recited in claim 1, in any way.

In fact, not only does Gerstenkorn fail to show or disclose a *brake relay*, but Gerstenkorn specifically teaches away from it. Gerstenkorn is directed to an elevator safety circuit monitor and control which does not have the disadvantages of its prior art (Gerstenkorn, col. 2, ll. 16-17). Gerstenkorn specifically discloses that one such disadvantage of the prior art arises "with electromechanical relays" (Gerstenkorn, col. 1, ll. 16). As a result, the claimed invention of Gerstenkorn is provided "without electromechanical contactors or relays" (Gerstenkorn, claim 1, col. 9, ll. 45-46). Thus, Gerstenkorn specifically does not show or disclose an elevator safety circuit that includes a *brake relay*, as recited in claim 1, in any way.

Second, since Gerstenkorn does not show or disclose a *brake relay* that *controls the brake*, Gerstenkorn cannot possibly show or disclose that *de-energizing the brake relay will brake the motor* as recited in claim 1. Further, since Gerstenkorn does not show or disclose the *brake relay* or that *de-energizing the brake relay will brake the motor*, Gerstenkorn cannot possibly show or disclose that *de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field* as recited in claim 1.

Third, Gerstenkorn does not show or disclose a *brake relay being connected with a safety switch in such a manner that de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field*, as recited in claim 1. Instead, Gerstenkorn is directed to a motor-switching and brake-switching circuit having motor-switching and brake-switching sub-circuits that separate the control impulse generation of the motor from the brake relay. For instance, as shown in Figures 4 and 5 of Gerstenkorn, the brake control 53, which

includes the brake magnet MGB, receives an output signal s9 of the intelligent protection system 52. However, the brake control 53 does not return a signal to the intelligent protection system 52, in any way. Therefore, Gerstenkorn cannot possibly show or disclose a *brake relay being connected with a safety switch in such a manner that de-energizing the brake relay will reliably blocks the control impulses required for generating the driving motor field*, as recited in claim 1.

Further, the Examiner asserts that column 8, line 65 through column 9 line 24 of Gerstenkorn shows or discloses a *brake relay being connected with a safety switch in such a manner that de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field*, as recited in claim 1. After reviewing the cited portion of Gerstenkorn, Applicants can find no relevant disclosure regarding this recitation. For instance, column 8, line 65 to column 9, line 6 of Gerstenkorn discloses that a relay can be placed in series with the brake magnet MGB. However, the relay of Gerstenkorn is provided to “switch off the brake current only when a transistor is defective” (Gerstenkorn, col. 9, ll. 2-3) (emphasis added). A defective transistor cannot be equated to *de-energizing the brake relay; and switching off the brake current* cannot be equated to *blocking the control impulses required for generating the driving motor field*. Thus, Gerstenkorn does not show or disclose that the relay is *connected with a safety switch in a manner that de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field*, as recited in claim 1.

Whereas column 9, lines 7-24 of Gerstenkorn discloses that a program controls and monitors the functions and sequences of the intelligent protection system 52 and, if a fault is recognized in the sequence of switching operations of various circuit components, the program “prevents dangerous states of the elevator by blocking of the motor current and by switching-off of the brake current” (Gerstenkorn, col. 9, ll. 21-24) (emphasis added). Recognizing a fault cannot be equated to *de-energizing the brake relay; and blocking of the motor current and switching-off of the brake current*, concurrently, cannot be equated to *blocking the control impulses required for generating the driving motor field upon a de-energizing of the brake relay*. Thus, Gerstenkorn does not show or disclose that the program, or any circuit component that it controls, is *connected with a safety*

switch in a manner that de-energizing the brake relay will reliably block the control impulses required for generating the driving motor field, as recited in claim 1.

In summary, the cited portion of Gerstenkorn discloses a relay and program that respond to a failure (e.g., a defective transistor or a recognition of a fault in the sequence of switching operations) by shutting down the elevator (e.g., by blocking the motor current and switching-off the brake current). Gerstenkorn does not show or disclose that the relay and program, for instance, during routine operation of the elevator, *block the control impulses required for generating the driving motor field upon a de-energizing of the brake relay.*

Therefore, Gerstenkorn does not show or disclose each and every recitation of claim 1 of the present invention. Accordingly, Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by Gerstenkorn is improper for at least these reasons, and should be withdrawn.

Since claims 2-8 depend, either directly or indirectly, from claim 1 and include additional recitations thereto, Applicants respectfully submit that the rejection of claims 2-8 under 35 U.S.C. § 102(b) as being anticipated by Gerstenkorn is improper for at least the same reasons, and should be withdrawn.

Applicants respectfully submit that nothing in the current Amendment constitutes new matter. Support for the amendments may be found in, at least, claims 1 and 7.

Having traversed each and every objection and rejection, Applicants respectfully request claims 1-8 be passed to issue.

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Applicants believe that no fees are due in connection with this Amendment and Response. If any fees are deemed necessary, please charge them to Deposit Account 13-0235.

Respectfully submitted,

By /Marina F. Cunningham/
Marina F. Cunningham
Registration No. 38,419
Attorney for Applicants

McCormick, Paulding & Huber LLP
CityPlace II
185 Asylum Street
Hartford, Connecticut 06103-3402
(860) 549-5290